

ABSTRACT

A correlation system for Time Division Multiple Access (TDMA) positioning systems is disclosed,
5 whereby a position receiver acquires, tracks, and demodulates a plurality of Code Division Multiple Access
(CDMA) modulated positioning signals are pulsed in a Time Division Multiple Access (TDMA) scheme.
A specialized correlation processor within the position receiver is configured to internally generate pseudo-
random number (PRN) code signal replicas of Code Division Multiple Access (CDMA) positioning signals
10 in synchronicity with their respectively received Time Division Multiple Access (TDMA) positioning
signals. This correlation system provides the position receiver with range measurements free from the
deleterious effects of Code Division Multiple Access (CDMA) cross-correlation artifacts and degraded
signal-to-noise ratios, therefore allowing the computation of high accuracy position solutions.